

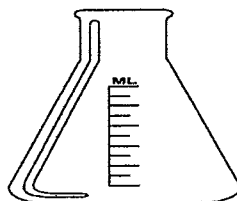
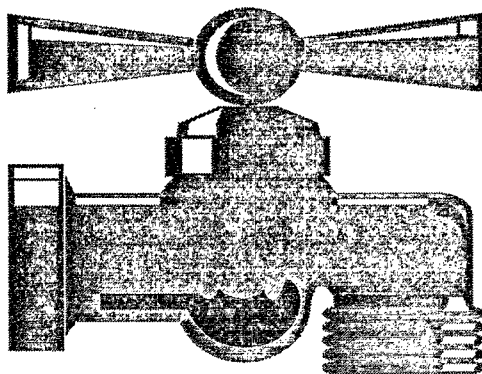
United States
Environmental Protection
Agency

Office of Water
4301

EPA 822-R-94-001
May 1994



DRINKING WATER REGULATIONS AND HEALTH ADVISORIES



.

.

.

.

.

.

.

.

.

.

.

.

.

.

.

.

.

.

.

.

.

.

.

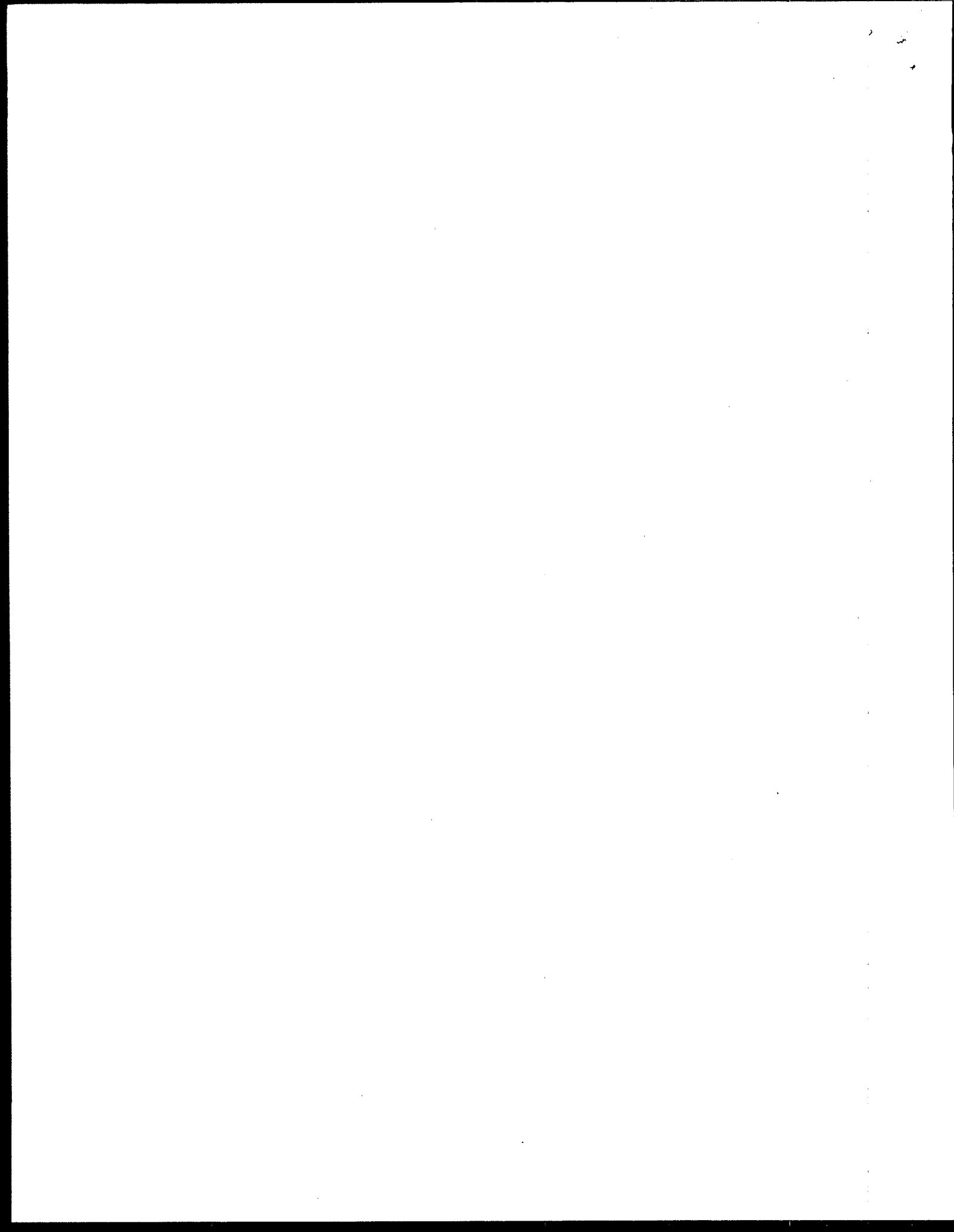
DRINKING WATER REGULATIONS AND HEALTH ADVISORIES

by

Office of Water
U.S. Environmental Protection Agency
Washington, D.C.
202-260-7571

SAFE DRINKING WATER HOTLINE
1-800-426-4791
Monday thru Friday, 8:30 AM to 5:00 PM EST

May 1994



LEGEND

Abbreviations column descriptions are:

- MCLG - Maximum Contaminant Level Goal. A non-enforceable concentration of a drinking water contaminant that is protective of adverse human health effects and allows an adequate margin of safety.
- MCL - Maximum Contaminant Level. Maximum permissible level of a contaminant in water which is delivered to any user of a public water system.
- RfD - Reference Dose. An estimate of a daily exposure to the human population that is likely to be without appreciable risk of deleterious effects over a lifetime.
- DWEL - Drinking Water Equivalent Level. A lifetime exposure concentration protective of adverse, non-cancer health effects, that assumes all of the exposure to a contaminant is from a drinking water source.

(*) The codes for the Status Reg and Status HA columns are as follows:

- F - final
D - draft
L - listed for regulation
P - proposed
I - tentative

Other codes found in the table include the following:

- NA - not applicable
PS - performance standard 0.5 NTU - 1.0 NTU
TT - treatment technique

- ** - No more than 5% of the samples per month may be positive. For systems collecting fewer than 40 samples/month, no more than 1 sample per month may be positive.

- *** - guidance

- Large discrepancies between Lifetime and Longer-term HA values may occur because of the Agency's conservative policies, especially with regard to carcinogenicity, relative source contribution, and less than lifetime exposures in chronic toxicity testing. These factors can result in a cumulative UF (uncertainty factor) of 10 to 1000 when calculating a Lifetime HA.

The scheme for categorizing chemicals according to their carcinogenic potential is as follows:

Group A: Human carcinogen

Sufficient evidence in epidemiologic studies to support causal association between exposure and cancer

Group B: Probable human carcinogen

Limited evidence in epidemiologic studies (Group B1) *and/or* sufficient evidence from animal studies (Group B2)

Group C: Possible human carcinogen

Limited evidence from animal studies *and* inadequate or no data in humans

Group D: Not classifiable

Inadequate or no human and animal evidence of carcinogenicity

Group E: No evidence of carcinogenicity for humans

No evidence of carcinogenicity in at least two adequate animal tests in different species *or* in adequate epidemiologic and animal studies

Drinking Water Standards and Health Advisories

May 1994

Page 1

Chemicals	Standards			Status HA	Health Advisories								Cancer Group
	Status Reg.	MCLG (mg/l)	MCL (mg/l)		10-kg Child			70-kg Adult					
					One-day (mg/l)	Ten-day (mg/l)	Longer- term (mg/l)	Longer- term (mg/l)	RfD (mg/kg/ day)	DWEL (mg/l)	Lifetime (mg/l)	mg/l at 10 ⁻⁴ Cancer Risk	
ORGANICS													
Acenaphthene	-	-	-	-	-	-	-	-	0.06	-	-	-	-
Acifluorfen	T	zero	-	F	2	2	0.1	0.4	0.013	0.4	-	0.1	B2
Acrylamide	F	zero	TT	F	0.2	0.2	0.01	0.04	0.001	0.04	-	0.001	B2
Acrylonitrile	T	zero	-	D	-	-	-	-	-	-	-	0.006	B1*
Adipate (diethylhexyl)	F	0.4	0.4	-	20	20	20	60	0.6	20	0.4	3	C
Alachlor	F	zero	0.002	F	0.1	0.1	-	-	0.01	0.4	-	0.04	B2
Aldicarb	D	0.007	0.007	D	-	-	-	-	0.001	0.035	0.007	-	D
Aldicarb sulfone	D	0.007	0.007	D	-	-	-	-	0.001	0.035	0.007	-	D
Aldicarb sulfoxide	D	0.007	0.007	D	-	-	-	-	0.001	0.035	0.007	-	D
Aldrin	-	-	-	D	0.0003	0.0003	0.0003	0.0003	0.00003	0.001	-	0.0002	B2
Ametryn	-	-	-	F	9	9	0.9	3	0.009	0.3	0.06	-	D
Ammonium sulfamate	-	-	-	F	20	20	20	80	0.28	8	2	-	D
Anthracene (PAH)	-	-	-	-	-	-	-	-	0.3	-	-	-	D
Atrazine	F	0.003	0.003	F	0.1	0.1	0.05	0.2	0.035	0.2*	0.003*	-	C
Baygon	-	-	-	F	0.04	0.04	0.04	0.1	0.004	0.1	0.003	-	C
Bentazon	T	0.02	-	F	0.3	0.3	0.3	0.9	0.0025	0.09	0.02	-	D
Benz(a)anthracene (PAH)	P	zero	0.0001	-	-	-	-	-	-	-	-	-	B2
Benzene	F	zero	0.005	F	0.2	0.2	-	-	-	-	-	0.1	A
Benzo(a)pyrene (PAH)	F	zero	0.0002	-	-	-	-	-	-	-	-	-	B2*
Benzo(b)fluoranthene (PAH)	P	zero	0.0002	-	-	-	-	-	-	-	-	-	B2
Benzo(g,h,i)perylene (PAH)	-	-	-	-	-	-	-	-	-	-	-	-	D
Benzo(k)fluoranthene (PAH)	P	zero	0.0002	-	-	-	-	-	-	-	-	-	B2
bis-2-Chloroisopropyl ether	-	-	-	F	4	4	4	13	0.04	1	0.3	-	D
Bromacil	L	-	-	F	5	5	3	9	0.13	5	0.09	-	C
Bromobenzene	L	-	-	D	-	-	-	-	-	-	-	-	-

* Under review.

NOTE: Anthracene and Benzo(g,h,i)perylene — not proposed in Phase V.

NOTE: Changes from the last version are noted in *Italic* and **Bold Face** print.

Drinking Water Standards and Health Advisories

May 1994

Page 2

Chemicals	Standards			Status HA	Health Advisories								Cancer Group
	Status Reg.	MCLG (mg/l)	MCL (mg/l)		10-kg Child			70-kg Adult					
					One-day (mg/l)	Ten-day (mg/l)	Longer- term (mg/l)	Longer- term (mg/l)	RfD (mg/kg/ day)	DWEL (mg/l)	Lifetime (mg/l)	mg/l at 10 ⁻⁴ Cancer Risk	
Bromochloroacetonitrile	L	-	-	D	-	-	-	-	-	-	-	-	-
Bromochloromethane	-	-	-	F	50	1	1	5	0.013	0.5	0.09	-	-
Bromodichloromethane (THM)	T	zero	0.1*/0.08 ⁺	D	7	7	4	13	0.02	0.7	-	0.06	B2
Bromoform (THM)	T	zero	0.1*/0.08 ⁺	D	5	2	2	6	0.02	0.7	-	0.4	B2
Bromomethane	T	-	-	F	0.1	0.1	0.1	0.5	0.001	0.04	0.01	-	D
Butyl benzyl phthalate (PAE)	P	zero	0.1	-	-	-	-	-	0.2	6	-	-	C
Butylate	-	-	-	F	2	2	1	4	0.05	2	0.35	-	D
Butylbenzene n-	-	-	-	D	-	-	-	-	-	-	-	-	-
Butylbenzene sec-	-	-	-	D	-	-	-	-	-	-	-	-	-
Butylbenzene tert-	-	-	-	D	-	-	-	-	-	-	-	-	-
Carbaryl	-	-	-	F	1	1	1	1	0.1	4	0.7	-	D
Carbofuran	F	0.04	0.04	F	0.05	0.05	0.05	0.2	0.005	0.2	0.04	-	E
Carbon tetrachloride	F	zero	0.005	F	4	0.2	0.07	0.3	0.0007	0.03	-	0.03	B2
Carboxin	-	-	-	F	1	1	1	4	0.1	4	0.7	-	D
Chloral hydrate	T	0.04	0.06 ⁺⁺	D	7	1.4	0.2	0.6	0.0002	0.07	0.06	-	C
Chloramben	-	-	-	F	3	3	0.2	0.5	0.015	0.5	0.1	-	D
Chlordane	F	zero	0.002	F	0.06	0.06	-	-	0.00006	0.002	-	0.003	B2
Chlorodibromomethane (THM)	T	0.06	0.1*/0.08 ⁺	D	7	7	2	8	0.02	0.7	0.06	-	C
Chloroethane	L	-	-	D	-	-	-	-	-	-	-	-	-
Chloroform (THM)	T	zero	0.1*/0.08 ⁺	D	4	4	0.1	0.4	0.01	0.4	-	0.6	B2
Chloromethane	L	-	-	F	9	0.4	0.4	1	0.004	0.1	0.003	-	C
Chlorophenol (2-)	-	-	-	D	0.05	0.05	0.05	0.2	0.005	0.2	0.04	-	D
p-Chlorophenyl methyl sulfide/sulfone/sulfoxide	-	-	-	**	-	-	-	-	-	-	-	-	D
Chloropicrin	L	-	-	-	-	-	-	-	-	-	-	-	-
Chlorothalonil	-	-	-	F	0.2	0.2	0.2	0.5	0.015	0.5	-	0.15	B2
Chlorotoluene o-	L	-	-	F	2	2	2	7	0.02	0.7	0.1	-	D
Chlorotoluene p-	L	-	-	F	2	2	2	7	0.02	0.7	0.1	-	D
Chlorpyrifos	-	-	-	F	0.03	0.03	0.03	0.1	0.003	0.1	0.02	-	D
Chrysene (PAH)	P	zero	0.0002	-	-	-	-	-	-	-	-	-	B2
Cyanazine	T	0.001	-	D	0.1	0.1	0.02	0.07	0.002	0.07	0.001	-	C

* Current MCL * Total for all THMs combined cannot exceed the 0.08 level. ** Total for all haloacetic acids cannot exceed 0.06 level.

** A HA will not be developed due to insufficient data; a "Database Deficiency Report has been published.

Drinking Water Standards and Health Advisories

May 1994

Page 3

Chemicals	Standards			Status HA	Health Advisories								Cancer Group
	Status Reg.	MCLG (mg/l)	MCL (mg/l)		10-kg Child			70-kg Adult					
					One-day (mg/l)	Ten-day (mg/l)	Longer- term (mg/l)	Longer- term (mg/l)	RfD (mg/kg/ day)	DWEL (mg/l)	Lifetime (mg/l)	mg/l at 10 ⁻⁴ Cancer Risk	
Cyanogen chloride	L	-	-	-	-	-	-	-	-	-	-	-	-
Cymene p-	-	-	-	D	-	-	-	-	-	-	-	-	-
2,4-D	F	0.07	0.07	F	1	0.3	0.1	0.4	0.01	0.4	0.07	-	D
DCPA (Dacthal)	L	-	-	F	80	80	5	20	0.5	20	4	-	D
Dalapon	F	0.2	0.2	F	3	3	0.3	0.9	0.026	0.9	0.2	-	D
Di[2-ethylhexyl]adipate	F	0.4	0.4	-	20	20	20	60	0.6	20	0.4	3	C
Diazinon	-	-	-	F	0.02	0.02	0.005	0.02	0.00009	0.003	0.0006	-	E
Dibenz(a,h)anthracene (PAH)	P	zero	0.0003	-	-	-	-	-	-	-	-	-	B2
Dibromoacetonitrile	L	-	-	D	2	2	2	8	0.02	0.8	0.02	-	C
Dibromochloropropane (DBCP)	F	zero	0.0002	F	0.2	0.05	-	-	-	-	-	0.003	B2
Dibromomethane	L	-	-	-	-	-	-	-	-	-	-	-	D
Dibutyl phthalate (PAE)	-	-	-	-	-	-	-	-	0.1	4	-	-	D
Dicamba	L	-	-	F	0.3	0.3	0.3	1	0.03	1	0.2	-	D
Dichloroacetaldehyde	L	-	-	D	-	-	-	-	-	-	-	-	-
Dichloroacetic acid	T	zero	0.06 ⁺⁺	D	1	1	1	4	0.004	0.1	-	-	B2
Dichloroacetonitrile	L	-	-	D	1	1	0.8	3	0.008	0.3	0.006	-	C
Dichlorobenzene o-	F	0.6	0.6	F	9	9	9	30	0.09	3	0.6	-	D
Dichlorobenzene m- *	F	0.6	0.6	F	9	9	9	30	0.09	3	0.6	-	D
Dichlorobenzene p-	F	0.075	0.075	F	10	10	10	40	0.1	4	0.075	-	C
Dichlorodifluoromethane	L	-	-	F	40	40	9	30	0.2	5	1	-	D
Dichloroethane (1,1-)	L	-	-	D	-	-	-	-	-	-	-	-	-
Dichloroethane (1,2-)	F	zero	0.005	F	0.7	0.7	0.7	2.6	-	-	-	0.04	B2
Dichloroethylene (1,1-)	F	0.007	0.007	F	2	1	1	4	0.009	0.4	0.007	-	C
Dichloroethylene (cis-1,2-)	F	0.07	0.07	F	4	3	3	11	0.01	0.4	0.07	-	D
Dichloroethylene (trans-1,2-)	F	0.1	0.1	F	20	2	2	6	0.02	0.6	0.1	-	D
Dichloromethane	F	zero	0.005	F	10	2	-	-	0.06	2	-	0.5	B2
Dichlorophenol (2,4-)	-	-	-	D	0.03	0.03	0.03	0.1	0.003	0.1	0.02	-	D
Dichloropropane (1,1-)	-	-	-	D	-	-	-	-	-	-	-	-	-
Dichloropropane (1,2-)	F	zero	0.005	F	-	0.09	-	-	-	-	-	0.05	B2
Dichloropropane (1,3-)	L	-	-	D	-	-	-	-	-	-	-	-	-

* The values for m-dichlorobenzene are based on data for o-dichlorobenzene.

** Total for all haloacetic acids cannot exceed 0.06 level.

Drinking Water Standards and Health Advisories

May 1994

Page 4

Chemicals	Standards			Status HA	Health Advisories								Cancer Group
	Status Reg.	MCLG (mg/l)	MCL (mg/l)		10-kg Child			70-kg Adult					
					One-day (mg/l)	Ten-day (mg/l)	Longer- term (mg/l)	Longer- term (mg/l)	RfD (mg/kg/ day)	DWEL (mg/l)	Lifetime (mg/l)	mg/l at 10 ⁻⁴ Cancer Risk	
Dichloropropane (2,2-)	L	-	-	D	-	-	-	-	-	-	-	-	-
Dichloropropene (1,1-)	L	-	-	D	-	-	-	-	-	-	-	-	-
Dichloropropene (1,3-)	T	zero	-	F	0.03	0.03	0.03	0.09	0.0003	0.01	-	0.02	B2
Dieldrin	-	-	-	F	0.0005	0.0005	0.0005	0.002	0.00005	0.002	-	0.0002	B2
Diethyl phthalate (PAE)	-	-	-	D	-	-	-	-	0.8	30	5	-	D
Diethylene glycol dinitrate	-	-	-	**	-	-	-	-	-	-	-	-	-
Diethylhexyl phthalate (PAE)	F	zero	0.006	D	-	-	-	-	0.02	0.7	-	0.3	B2*
Diisopropyl methylphosphonate	-	-	-	F	8	8	8	30	0.08	3	0.6	-	D
Dimethrin	-	-	-	F	10	10	10	40	0.3	10	2	-	D
Dimethyl methylphosphonate	-	-	-	F	2	2	2	6	0.2	7	0.1	0.7	C
Dimethyl phthalate (PAE)	-	-	-	-	-	-	-	-	-	-	-	-	D
1,3-Dinitrobenzene	-	-	-	F	0.04	0.04	0.04	0.14	0.0001	0.005	0.001	-	D
Dinitrotoluene (2,4-)	L	-	-	F	0.50	0.50	0.30	1	0.002	0.1	-	-	-
Dinitrotoluene (2,6-)	L	-	-	F	0.40	0.40	0.40	1	0.001	0.04	-	-	-
tg 2,6 & 2,4 dinitrotoluene ***	-	-	-	-	-	-	-	-	-	-	-	0.005	B2
Dinoseb	F	0.007	0.007	F	0.3	0.3	0.01	0.04	0.001	0.04	0.007	-	D
Dioxane p-	-	-	-	F	4	0.4	-	-	-	-	-	0.7	B2
Diphenamid	-	-	-	F	0.3	0.3	0.3	1	0.03	1	0.2	-	D
Diphenylamine	-	-	-	F	1	1	0.3	1	0.03	1	0.2	-	D
Diquat	F	0.02	0.02	-	-	-	-	-	0.0022	0.08	0.02	-	D
Disulfoton	-	-	-	F	0.01	0.01	0.003	0.009	0.00004	0.001	0.0003	-	E
Dithiane (1,4-)	-	-	-	F	0.4	0.4	0.4	1	0.01	0.4	0.08	-	D
Diuron	-	-	-	F	1	1	0.3	0.9	0.002	0.07	0.01	-	D
Endothall	F	0.1	0.1	F	0.8	0.8	0.2	0.2	0.02	0.7	0.1	-	D
Endrin	F	0.002	0.002	F	0.02	0.02	0.003	0.01	0.0003	0.01	0.002	-	D
Epichlorohydrin	F	zero	TT	F	0.1	0.1	0.07	0.07	0.002	0.07	-	0.4	B2
Ethylbenzene	F	0.7	0.7	F	30	3	1	3	0.1	3	0.7	-	D
Ethylene dibromide (EDB)	F	zero	0.00005	F	0.008	0.008	-	-	-	-	-	0.00004	B2
Ethylene glycol	-	-	-	F	20	6	6	20	2	40	7	-	D
ETU	L	-	-	F	0.3	0.3	0.1	0.4	0.00008	0.003	-	0.03	B2
Fenamiphos	-	-	-	F	0.009	0.009	0.005	0.02	0.00025	0.009	0.002	-	D

* Under review. ** A HA will not be developed due to insufficient data; a "Database Deficiency Report" has been published.

*** tg = technical grade

Drinking Water Standards and Health Advisories

May 1994

Page 5

Chemicals	Standards			Status HA	Health Advisories								Cancer Group
	Status Reg.	MCLG (mg/l)	MCL (mg/l)		10-kg Child			70-kg Adult					
					One-day (mg/l)	Ten-day (mg/l)	Longer- term (mg/l)	Longer- term (mg/l)	RfD (mg/kg/ day)	DWEL (mg/l)	Lifetime (mg/l)	mg/l at 10 ⁻⁴ Cancer Risk	
Fluometron	-	-	-	F	2	2	2	5	0.013	0.4	0.09	-	D
Fluorene (PAH)	-	-	-	-	-	-	-	-	0.04	-	-	-	D
Fluorotrichloromethane	L	-	-	F	7	7	3	10	0.3	10	2	-	D
Fog Oil	-	-	-	D	-	-	-	-	-	-	-	-	-
Fonofos	-	-	-	F	0.02	0.02	0.02	0.07	0.002	0.07	0.01	-	D
Formaldehyde	-	-	-	D	10	5	5	20	0.15	5	1	-	B1
Gasoline, unleaded (benzene)	-	-	-	D	-	-	-	-	-	-	0.005	-	-
Glyphosate	F	0.7	0.7	F	20	20	1	1	0.1	4	0.7	-	E
Heptachlor	F	zero	0.0004	F	0.01	0.01	0.005	0.005	0.0005	0.02	-	0.0008	B2
Heptachlor epoxide	F	zero	0.0002	F	0.01	-	0.0001	0.0001	1E-5	0.0004	-	0.0004	B2
Hexachlorobenzene	F	zero	0.001	F	0.05	0.05	0.05	0.2	0.0008	0.03	-	0.002	B2
Hexachlorobutadiene	T	0.001	-	F	0.3	0.3	0.1	0.4	0.002	0.07	0.001	-	C
Hexachlorocyclopentadiene	F	0.05	0.05	-	-	-	-	-	0.007	0.2	-	-	D
Hexachloroethane	L	-	-	F	5	5	0.1	0.5	0.001	0.04	0.001	-	C
Hexane (n-)	-	-	-	F	10	4	4	10	-	-	-	-	D
Hexazinone	-	-	-	F	3	3	3	9	0.033	1	0.2	-	D
HMX	-	-	-	F	5	5	5	20	0.05	2	0.4	-	D
Indeno(1,2,3,-c,d)pyrene (PAH)	P	zero	0.0004	D	-	-	-	-	-	-	-	-	B2
Isophorone	L	-	-	F	15	15	15	15	0.2	7	0.1	4	C
Isopropyl methylphosphonate	-	-	-	D	30	30	30	100	0.1	4.0	0.7	-	D
Isopropylbenzene	-	-	-	D	-	-	-	-	-	-	-	-	-
Lindane	F	0.0002	0.0002	F	1	1	0.03	0.1	0.0003	0.01	0.0002	-	C
Malathion	-	-	-	F	0.2	0.2	0.2	0.8	0.02	0.8	0.2	-	D
Maleic hydrazide	-	-	-	F	10	10	5	20	0.5	20	4	-	D
MCPA	-	-	-	F	0.1	0.1	0.1	0.4	0.0015	0.05	0.01	-	E
Methomyl	L	-	-	F	0.3	0.3	0.3	0.3	0.025	0.9	0.2	-	D
Methoxychlor	F	0.04	0.04	F	0.05	0.05	0.05	0.2	0.005	0.2	0.04	-	D
Methyl ethyl ketone	-	-	-	F	-	-	-	-	-	-	-	-	*
Methyl parathion	-	-	-	F	0.3	0.3	0.03	0.1	0.00025	0.009	0.002	-	D

* Under review.

Drinking Water Standards and Health Advisories

May 1994

Page 6

Chemicals	Standards			Status HA	Health Advisories								Cancer Group
	Status Reg.	MCLG (mg/l)	MCL (mg/l)		10-kg Child			70-kg Adult					
					One-day (mg/l)	Ten-day (mg/l)	Longer- term (mg/l)	Longer- term (mg/l)	RfD (mg/kg/ day)	DWEL (mg/l)	Lifetime (mg/l)	mg/l at 10 ⁻⁴ Cancer Risk	
Methyl tert butyl ether	L	-	-	D	3	3	0.5	2	0.005	0.2	0.04	-	D
Metolachlor	L	-	-	F	2	2	2	5	0.15	5	0.1	-	C
Metribuzin	L	-	-	F	5	5	0.3	0.9	0.025	0.9	0.2	-	D
Monochloroacetic acid	L	-	-	D	-	-	-	-	-	-	-	-	-
Monochlorobenzene	F	0.1	0.1	F	2	2	2	7	0.02	0.7	0.1	-	D
Naphthalene	-	-	-	F	0.5	0.5	0.4	1	0.004	0.1	0.02	-	D
Nitrocellulose (non-toxic)	-	-	-	F	-	-	-	-	-	-	-	-	-
Nitroguanidine	-	-	-	F	10	10	10	40	0.1	4	0.7	-	D
Nitrophenol p-	-	-	-	F	0.8	0.8	0.8	3	0.008	0.3	0.06	-	D
Oxamyl (Vydate)	F	0.2	0.2	F	0.2	0.2	0.2	0.9	0.025	0.9	0.2	-	E
Paraquat	-	-	-	F	0.1	0.1	0.05	0.2	0.0045	0.2	0.03	-	E
Pentachloroethane	-	-	-	D	-	-	-	-	-	-	-	-	-
Pentachlorophenol	F	zero	0.001	F	1	0.3	0.3	1	0.03	1	-	0.03	B2
Phenanthrene (PAH)	-	-	-	-	-	-	-	-	-	-	-	-	-
Phenol	-	-	-	D	6	6	6	20	0.6	20	4	-	D
Picloram	F	0.5	0.5	F	20	20	0.7	2	0.07	2	0.5	-	D
Polychlorinated biphenyls (PCBs)	F	zero	0.0005	P	-	-	-	-	-	-	-	0.0005	B2
Prometon	L	-	-	F	0.2	0.2	0.2	0.5	0.015*	0.5*	0.1*	-	D
Pronamide	-	-	-	F	0.8	0.8	0.8	3	0.075	3	0.05	-	C
Propachlor	-	-	-	F	0.5	0.5	0.1	0.5	0.013	0.5	0.09	-	D
Propazine	-	-	-	F	1	1	0.5	2	0.02	0.7	0.01	-	C
Propham	-	-	-	F	5	5	5	20	0.02	0.6	0.1	-	D
Propylbenzene n-	-	-	-	D	-	-	-	-	-	-	-	-	-
Pyrene (PAH)	-	-	-	-	-	-	-	-	0.03	-	-	-	D
RDX	-	-	-	F	0.1	0.1	0.1	0.4	0.003	0.1	0.002	0.03	C
Simazine	F	0.004	0.004	F	0.07	0.07	0.07	0.07	0.005	0.2	0.004	-	C
Styrene	F	0.1	0.1	F	20	2	2	7	0.2	7	0.1	-	C
2,4,5-T	L	-	-	F	0.8	0.8	0.8	1	0.01	0.35	0.07	-	D
2,3,7,8-TCDD (Dioxin)	F	zero	3E-08	F	1E-06	1E-07	1E-08	4E-08	1E-09	4E-08	-	2E-08	B2

* Under review. NOTE: Phenanthrene — not proposed.

Drinking Water Standards and Health Advisories

May 1994

Page 7

Chemicals	Standards			Status HA	Health Advisories								Cancer Group
	Status Reg.	MCLG (mg/l)	MCL (mg/l)		10-kg Child			70-kg Adult					
					One-day (mg/l)	Ten-day (mg/l)	Longer- term (mg/l)	Longer- term (mg/l)	RfD (mg/kg/ day)	DWEL (mg/l)	Lifetime (mg/l)	mg/l at 10 ⁻⁴ Cancer Risk	
Tebuthiuron	-	-	-	F	3	3	0.7	2	0.07	2	0.5	-	D
Terbacil	-	-	-	F	0.3	0.3	0.3	0.9	0.013	0.4	0.09	-	E
Terbufos	-	-	-	F	0.005	0.005	0.001	0.005	0.00013	0.005	0.0009	-	D
Tetrachloroethane (1,1,1,2-)	L	-	-	F	2	2	0.9	3	0.03	1	0.07	0.1	C
Tetrachloroethane (1,1,2,2-)	L	-	-	D	-	-	-	-	-	-	-	-	-
Tetrachloroethylene	F	zero	0.005	F	2	2	1	5	0.01	0.5	-	0.07	-
Tetranitromethane	-	-	-	**	-	-	-	-	-	-	-	-	-
Toluene	F	1	1	F	20	2	2	7	0.2	7	1	-	D
Toxaphene	F	zero	0.003	F	0.5	0.04	-	-	0.1	0.0035	-	0.003	B2
2,4,5-TP	F	0.05	0.05	F	0.2	0.2	0.07	0.3	0.0075	0.3	0.05	-	D
1,1,2-Trichloro-1,2,2- trifluoroethane	-	-	-	-	-	-	-	-	-	-	-	-	-
Trichloroacetic acid	T	0.3	0.06 ⁺⁺	D	4	4	4	13	0.1	4.0	0.3	-	C
Trichloroacetonitrile	L	-	-	D	0.05	0.05	-	-	-	-	-	-	-
Trichlorobenzene (1,2,4-)	F	0.07	0.07	F	0.1	0.1	0.1	0.5	0.01	0.4	0.07	-	D
Trichlorobenzene (1,3,5-)	-	-	-	F	0.6	0.6	0.6	2	0.006	0.2	0.04	-	D
Trichloroethane (1,1,1-)	F	0.2	0.2	F	100	40	40	100	0.035	1	0.2	-	D
Trichloroethane (1,1,2-)	F	0.003	0.005	F	0.6	0.4	0.4	1	0.004	0.1	0.003	-	C
Trichloroethanol (2,2,2-)	L	-	-	-	-	-	-	-	-	-	-	-	-
Trichloroethylene	F	zero	0.005	F	-	-	-	-	-	0.3	-	0.3	B2
Trichlorophenol (2,4,6-)	L	-	-	D	-	-	-	-	-	-	-	0.3	B2
Trichloropropane (1,1,1-)	-	-	-	D	-	-	-	-	-	-	-	-	-
Trichloropropane (1,2,3-)	L	-	-	F	0.6	0.6	0.6	2	0.006	0.2	0.04	-	B2
Trifluralin	L	-	-	F	0.08	0.08	0.08	0.3	0.0075	0.3	0.005	0.5	C
Trimethylbenzene (1,2,4-)	-	-	-	D	-	-	-	-	-	-	-	-	-
Trimethylbenzene (1,3,5-)	-	-	-	D	-	-	-	-	-	-	-	-	-
Trinitroglycerol	-	-	-	F	0.005	0.005	0.005	0.005	-	-	0.005	-	-
Trinitrotoluene	-	-	-	F	0.02	0.02	0.02	0.02	0.0005	0.02	0.002	0.1	C
Vinyl chloride	F	zero	0.002	F	3	3	0.01	0.05	-	-	-	0.0015	A
Xylenes	F	10	10	F	40	40	40	100	2	60	10	-	D

** A HA will not be developed due to insufficient data; a "Database Deficiency Report" has been published.

** Total for all haloacetic acids cannot exceed 0.06 level.

Drinking Water Standards and Health Advisories

May 1994

Page 8

Chemicals	Standards			Status HA	Health Advisories								Cancer Group
	Status Reg.	MCLG (mg/l)	MCL (mg/l)		10-kg Child			70-kg Adult					
					One-day (mg/l)	Ten-day (mg/l)	Longer- term (mg/l)	Longer- term (mg/l)	RfD (mg/kg/ day)	DWEL (mg/l)	Lifetime (mg/l)	mg/l at 10 ⁻⁴ Cancer Risk	
INORGANICS													
Aluminum	L	-	-	D	-	-	-	-	-	-	-	-	-
Ammonia	-	-	-	D	-	-	-	-	-	-	30	-	D
Antimony	F	0.006	0.006	F	0.01	0.01	0.01	0.015	0.0004	0.01	0.003	-	D
Arsenic	*	-	0.05	D	-	-	-	-	-	-	-	0.002	A
Asbestos (fibers/l >10µm length)	F	7 MFL	7 MFL	-	-	-	-	-	-	-	-	700 MFL	A
Barium	F	2	2	F	-	-	-	-	0.07	2	2	-	D
Beryllium	F	0.004	0.004	D	30	30	4	20	0.005	0.2	-	0.0008	B2
Boron	L	-	-	D	4	0.9	0.9	3	0.09	3	0.6	*	D
Bromate	L	zero	0.01	-	-	-	-	-	-	-	-	-	-
Cadmium	F	0.005	0.005	F	0.04	0.04	0.005	0.02	0.0005	0.02	0.005	-	D
Chloramine	T 4***	4		D	1	1	1	1	0.1	3.3	3/4***	-	-
Chlorate	L	-	-	D	-	-	-	-	-	-	-	-	-
Chlorine	T	4	4	D	-	-	-	-	0.08	-	-	-	D
Chlorine dioxide	T	0.3	0.8	D	-	-	-	-	0.01	0.35	0.3	-	D
Chlorite	L	0.08	1	D	-	-	-	-	0.003	0.1	0.08	-	D
Chromium (total)	F	0.1	0.1	F	1	1	0.2	0.8	0.005	0.2	0.1	-	D
Copper	F	1.3	TT**	-	-	-	-	-	-	-	-	-	D
Cyanide	P	0.2	0.2	F	0.2	0.2	0.2	0.8	0.022	0.8	0.2	-	D
Fluoride*	F	4	4	-	-	-	-	-	0.12	-	-	-	-
Hypochlorite	T	4 [†]	-	-	-	-	-	-	-	-	-	-	-
Hypochlorous acid	T	4 [†]	-	-	-	-	-	-	-	-	-	-	-
Lead (at tap)	F	zero	TT**	-	-	-	-	-	-	-	-	-	B2
Manganese	L	-	-	D	-	-	-	-	0.14/ 0.005	-	-	-	-
Mercury (inorganic)	F	0.002	0.002	F	-	-	-	0.002	0.0003	0.01	0.002	-	D
Molybdenum	L	-	-	D	-	0.08	0.01	0.05	0.005	0.2	0.04	-	D
Nickel	F	0.1	0.1	F	1	1	0.5	1.7	0.02	0.6	0.1	-	D
Nitrate (as N)	F	10	10	F	-	10*	-	-	1.6	-	-	-	*

* Under review. ** Copper — action level 1.3 mg/L; Lead - action level 0.015 mg/L. *** Measured as free chlorine. [†] Regulated as chlorine.

Drinking Water Standards and Health Advisories

May 1994

Page 9

Chemicals	Standards			Status HA	Health Advisories								Cancer Group
	Status Reg.	MCLG (mg/l)	MCL (mg/l)		10-kg Child			70-kg Adult					
					One-day (mg/l)	Ten-day (mg/l)	Longer- term (mg/l)	Longer- term (mg/l)	RfD (mg/kg/ day)	DWEL (mg/l)	Lifetime (mg/l)	mg/l at 10 ⁻⁴ Cancer Risk	
Nitrite (as N)	F	1	1	F	-	1*	-	-	0.16*	-	-	-	*
Nitrate + Nitrite (both as N)	F	10	10	F	-	-	-	-	-	-	-	-	*
Selenium	F	0.05	0.05	-	-	-	-	-	0.005	-	-	-	-
Silver	-	-	-	D	0.2	0.2	0.2	0.2	0.005	0.2	0.1	-	D
Sodium	-	-	-	D	-	-	-	-	-	20***	-	-	-
Strontium	L	-	-	D	25	25	25	90	0.6	90	17	-	D
Sulfate	P	**	**	-	-	-	-	-	-	-	-	-	-
Thallium	F	0.0005	0.002	F	0.007	0.007	0.007	0.02	0.00007	0.002	0.0004	-	-
Vanadium	L	-	-	D	-	-	-	-	-	-	-	-	D
White phosphorous	-	-	-	F	-	-	-	-	0.00002	0.0005	0.0001	-	D
Zinc	L	-	-	F	6	6	3	12	0.3	11	2	-	D
Zinc chloride (measured as Zinc)	L	-	-	F	6	6	3	12	0.3	11	2	-	D
RADIONUCLIDES													
Beta particle and photon activity (formerly man-made radionuclides)	P	zero	4 mrem	-	-	-	-	-	-	-	-	4 mrem/y	A
Gross alpha particle activity	P	zero	15 pCi/L	-	-	-	-	-	-	-	-	15 pCi/L	A
Radium 226	P	zero	20 pCi/L	-	-	-	-	-	-	-	-	20 pCi/L	A
Radium 228	P	zero	20 pCi/L	-	-	-	-	-	-	-	-	20 pCi/L	A
Radon	P	zero	300 pCi/L	-	-	-	-	-	-	-	-	150 pCi/L	A
Uranium	P	zero	20 µg/L	-	-	-	-	-	0.003	-	-	*	A

* Under review.

** Deferred.

*** Guidance.

Secondary Maximum Contaminant Levels

May 1994

Page 10

Chemicals	Status	SMCLs (mg/L)
Aluminum	F	0.05 to 0.2
Chloride	F	250
Color	F	15 color units
Copper	F	1.0
Corrosivity	F	non-corrosive
Fluoride*	F	2.0
Foaming agents	F	0.5
Iron	F	0.3
Manganese	F	0.05
Odor	F	3 threshold odor numbers
pH	F	6.5 — 8.5
Silver	F	0.1
Sulfate	F	250
Total dissolved solids (TDS)	F	500
Zinc	F	5

Status Codes: P — proposed, F — final

* Under review.

Microbiology

May 1994

Page 11

	Status	MCLG	MCL
Cryptosporidium	L	-	-
<i>Giardia lamblia</i>	F	zero	TT
<i>Legionella</i>	F ^B	zero	TT
Standard Plate Count	F ^B	NA	TT
Total Coliforms (after 12/31/90)	F	zero	**
Turbidity (after 12/31/90)	F	NA	PS
Viruses	F ^B	zero	TT

Key: PS, TT, F, defined as previously stated.

^B Final for systems using surface water; also being considered for regulation under groundwater disinfection rule.

1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21. 22. 23. 24. 25. 26. 27. 28. 29. 30. 31. 32. 33. 34. 35. 36. 37. 38. 39. 40. 41. 42. 43. 44. 45. 46. 47. 48. 49. 50. 51. 52. 53. 54. 55. 56. 57. 58. 59. 60. 61. 62. 63. 64. 65. 66. 67. 68. 69. 70. 71. 72. 73. 74. 75. 76. 77. 78. 79. 80. 81. 82. 83. 84. 85. 86. 87. 88. 89. 90. 91. 92. 93. 94. 95. 96. 97. 98. 99. 100.

